



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/578,155

05/23/2000

Michael R. Krause

10991833-1

4285

22879

7590

03/30/2006

EXAMINER

DINH, DUNG C

HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

ART UNIT

PAPER NUMBER

2153

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/578,155

Applicant(s)

KRAUSE ET AL.

Examiner

Dung Dinh

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/18/05</u> | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Arguments***

Applicant's arguments filed 1/11/06 have been fully considered but they are not persuasive.

Applicant argued that Wilson does not teach multiplexing unit of work produced by a source application and demultiplexing at the destination device back into unit of works. The argument is not persuasive. Wilson teach transmitting data from a source host to a destination storage node over an Ethernet network (see fig.1C). Data transmit in the Ethernet network is a series of bit streams. Hence, it is inherent that transmission of data over an Ethernet network involves multiplexing data bytes at the source (unit of works) into serial bit stream and the destination demultiplexing the serial bit stream back into data bytes.

Applicant argued that Wilson does not teach implementing a reliable datagram service between the source and the destination. The argument is not persuasive because "reliable datagram service" as recited in the claims is nothing more than a statement of purpose or at best a statement of intended result. In claim 1, the phrase "wherein the source ... together implement a reliable datagram service ..." does not add any further limitation to the rest of the claim. The "reliable

Art Unit: 2153

datagram service" is the functional limitations recited prior in the claim. Therefore, the term "reliable datagram service" as used in the claim served nothing more than a label for the protocol. Applicant chooses to call his protocol "reliable datagram protocol service". Wilson chooses to call his as "data stream service". The two protocols are the equivalent if the steps or functions required by the protocols are the same; not what the protocol is labeled as. Wilson 'stream service' guarantees delivery and order of packets (col.17 line 45 to col. 18 line 17). Therefore, Wilson 'stream service' implements a reliable protocol as claimed.

Applicant compared the "reliable datagram service" with the conventional unreliable datagram service. Applicant stated the conventional datagram service (e.g. UDP) does not guaranteed order of units of work whereas Applicant's protocol does. This is true because by conventional usage 'datagram' means an independent, self-contained entity of data that does not rely on earlier exchange between the source and destination. (see RFC 1594 - glossary p.33). Applicant's "reliable datagram service" requires a sequence order numbering of the data packets and provide for acknowledgement of missing packets. Hence, despite applicant labeling this protocol as a 'datagram' service, this service is not datagram service (as it is conventionally

Art Unit: 2153

defined) but is akin to the 'stream service' as disclosed by Wilson. Therefore, the term 'datagram' as used in claims 1 and 26 is merely a label and does not serve to further limit the claim.

Applicant argued the Wilson and Shay combined does not teach the queue holding transmitted but not acknowledge. Applicant argued that Wilson teaches a Windowing but not a sliding window as that of Shay. Applicant argued that Shay teaches sliding window for a reliable connection not for a datagram service. The argument is not persuasive because as stated above, the term 'datagram' as used in the claims does not provide further limitation to the claim but serves only as a label. Regarding the windowing of Wilson. Applicant argued that Wilson window is not sliding window as that disclosed by Shay by citing to col.18 lines 17-23. That section discloses the receiver using the window value to know how big of a buffer its need to allocate. This disclosure in no way saying that this is not a sliding window. Wilson does not specifically uses the word 'sliding window'. However the sliding window functionality is explicitly disclosed from the usage of the NAK and the retransmission of the packets higher than indicated by the NAK as described on col. 18 lines 1-16. That portion describes the function of a sliding window which is a queue

Art Unit: 2153

holding data not yet acknowledge and data yet to be transmit (as evidence by the disclosure of Shay).

Claims 1-45 are pending for examination. Claims 1-45 are rejected as stated in the prior office action.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2153

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Dinh whose telephone number is (571) 272-3943. The examiner can normally be reached on Monday-Friday from 7:00 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached at (571) 272-3949.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dung Dinh  
Primary Examiner  
March 24, 2006